

#6

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/533,365
Source: PG/10
Date Processed by STIC: 5/19/05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/10/533,365

TIME: 10:51:48

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\05182005\J533365.raw

4 <110> APPLICANT: Reynisdottir, Inga
 5 Gulcher, Jeffrey R.
 6 Grant, Struan F.
 7 Thorleifsson, Gudmar
 9 <120> TITLE OF INVENTION: Human Type II Diabetes Gene - Slit-3
 10 Located on Chromosome 5q35
 13 <130> FILE REFERENCE: 2345.2046-007
 C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/533,365
 C--> 16 <141> CURRENT FILING DATE: 2005-04-29
 18 <150> PRIOR APPLICATION NUMBER: PCT/US03/34801
 19 <151> PRIOR FILING DATE: 2003-10-31
 21 <150> PRIOR APPLICATION NUMBER: 60/423,541
 22 <151> PRIOR FILING DATE: 2002-11-01
 24 <160> NUMBER OF SEQ ID NOS: 236
 26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 634888
 30 <212> TYPE: DNA
 31 <213> ORGANISM: homo sapiens
 33 <400> SEQUENCE: 1
 34 gctccccagc ccagcccca gcccggacctc cccggggcgcc acgccccatt gcgctcgccc 60
 35 cagggtcccca acccgggccc cggggccagcg gggccagggg gcgctccgca cctgggcaact 120
 36 cccagcgcgat cgcagcgggg cagcgcgcggc cccgcccgat gagctgctgt tgctgccgcc 180
 37 gccgcgcgcc ggagcgcgcc gctccgcgcc cgccccgtgc gctgagcac cgagctcgcc 240
 38 cctcctccgc gctaactccg ccgcccgcgc cccaggccgc ccgcgctccc cgcgcgcctc 300
 39 ctcgggctcc acgcgtcttg ccccgagag gcagcctcct ccaggagcgg ggcctgcac 360
 40 accatggccc ccgggtgggc aggggtcgcc gccgcgctgc gcgcccgcct ggcgctggc 420
 41 ttggcgctgg cgagcgtcct gagtgggcct ccagccgtcg cctgccccac caagtgtacc 480
 42 tgctccgctg ccagcgtgga ctgccacggg ctgggcctcc gcgcggttcc tcggggcatc 540
 43 ccccgcaacg ctgagcgcct gtgagtacct ctgccccacc ccacgcgggc caccacactg 600
 44 ggtcccaccg agggggcccc aggcgccaga tccgtccttt cccctcgcc tccctggatg 660
 45 cagtctctat tctcatccct tcttggtatc gatccctcac tctccgagct gggggctctg 720
 46 aggcttggtc agatctggaa agagaggtct cgaaaccccc agcgtatggc aaagagcagt 780
 47 gcctctccag ggggtgagggt tccagacgca gggcccgtg acagcttcca aggagtagct 840
 48 gaggagaggc gaggggaggc aagagcactg cagcctcaag gtcttagggg gagggtcagg 900
 49 ggtctgcgct cgtaaaaaag gggggcgggc gaaggagaaa gctataggat gatgggcccgt 960
 50 caaggcgcgg aggcgggaga gagggcccga gactgttgac ctgcttgagg atcagaatgg 1020
 51 gccagccgct ctctggctgc ccttgcaagg aaagttaga gtgtgggtga aggtttaact 1080
 52 tctgaggaac tggacagatt cagagtgggt gctcgcaaaa cccgctctgc ctggagcgca 1140
 53 gtctgggaga tgccaagttg cagccccggg tgaatttttt atggctcggt tataaatgcc 1200
 54 tccccgaacg aaggggcccg agaatggaaa tgctgacagc cttcaaatg agaccgagcg 1260
 55 ttataatctt acaaaccgca ctacgcctca gatcctgggc ttggcagcga atggagaggc 1320
 56 gcttgagaaa tgggggtggt tgaccctagt tttagcccca attgtgcaac caaatattta 1380

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/533,365

DATE: 05/19/2005

TIME: 10:51:48

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\05182005\J533365.raw

```

57 cttttcatat gtcaacgttt tggaaacatt tatcattttg atcctcggac cagattcaaa 1440
58 acttggactc cggggtgggc tcctcttagt ccgcagttgg ggtggggtaa gggagtgggg 1500
59 gagaaacgct ggagtgggtg ggaagcctta ctgggaaccc agccgagaag tgggtgaggg 1560
60 tttgctctag tgtggtagat tccctccgtg tcttgcctc cctcttctcc ccttctcat 1620
61 gtgccttagg ggtaggcgcc tggatcttcc actctgcttt cttgacttca ggctggaaga 1680
62 gagtagtgat gacaagcatt gtccatagat gtgtatttcc tgctagtcac ctctatcac 1740
63 cccacctcct cttctcttcc acttctttgt gcatctctgg gtggagactc agcagaactg 1800
64 tcttcttat tctggtgct ctcttttcc tttggctcag tactttttg ttttccaca 1860
65 agtgacgtga ttgttttgtt ggggtgaacc acagaatcct aaagggtgag agccgaatct 1920
66 ttattaacac atgtcgaaaa ccaggcttgg aagtgtaaaa tgacttgccc aagaaaacac 1980
67 agcaagtga cggaataaaa ggggctagaa tccaggtttt cacaccttaa ttcagacatt 2040
68 aagttagtcc ataggagtga aaaacttgtt ttagtggtat ttttagatac ctataacttg 2100
69 taaactaagt tcccctctc gtcacaccag tgctagccac atgagttagt gaaataataa 2160
70 ttatagctaa tgtttgataa atgcttttca tgccttgatt tgtgtatatg tattatctca 2220
71 ttgaatcact ccaacagtcc tgttagttac ataggcaatg cttattactc cctttcacag 2280
72 ttaagccatc ttgtcattta ctcaaggtcg tgcagctagt gaagtgttg gatccaagcc 2340
73 tgactgggtc ctaagccac aaccgttatc actctcctgg tcatccttgg aacaagggtc 2400
74 agtttgggcc acgatctata aacagacagt cttgggaggg ttctggctgg gcttggatct 2460
75 tagaataggc tgctgttgc tctgcttctg gtataccctg caaatgttca gctcactttg 2520
76 atgttaggtc tgctgcttgg ggtctcgcaa ctacatctt cgcacttca aaatcgtgct 2580
77 ccagtgttgg gaaaccaaga agagtaagtc cctctcctcc tgggtgtgtag gaagttttcc 2640
78 agagctgcag gaaccgcacc catgccagca tgccaccgag tcatcttctc taggggatct 2700
79 gtgcagctca gggcaaccca tcagctctag aactggagaa acaggacaga gactggagtc 2760
80 ctggtcattc ccagaggccc cctgctgcag tcgttaatag gcagtggcag agcaggagct 2820
81 tctttgatgt ctctggtctc ttctgcctca gttgtggtca ctggtgccac tttggccagg 2880
82 gtgcatgggg gtgccgcgat ggtatctcat tctagtctcc ttctccctg ggaatggggg 2940
83 acagtctgta ggagcaagct gggtcagggt cactgcaggg tttcagggca accaccaac 3000
84 agtccttcac caccaaagtc ctgcaccaca ctctctctca gccaaactcaa atgtaacatt 3060
85 tcaattctga aaactcttgg gggatatttg gcatttttac tctctgccaa ggatttcttc 3120
86 agaggaatca ctcatattt cctgccttca ttcatcaac aaacattact tgaagccggg 3180
87 cgcagtggct catgcctgtt atcccagcac tttgggaggc tgaggtgaga ggatcgcttg 3240
88 agcctaggag tttgagaaca aacatgactt gaacctctac tgcattccag aaactgtata 3300
89 tagaaccatt gcaaatacac aagaaaacca gcactcaat gtaaagaatg taagcaaaag 3360
90 atagaaggaa acttgctttg gtgagccttt tgaacttccc agggttcatg ttgccatggg 3420
91 gcacgttttg tcagactgt catcagatgc tcaggacctt cctaaaaatcc agttttctga 3480
92 tctcaaaggt ttaaattgtg ttttaaaaca aagaaactgc attttctccg ttctccattc 3540
93 ttggtactct gcctcccaa aaggctttga tgaagggtt tgtgtgtgtg tgtgtctgtg 3600
94 tatattgctt ctctggatgt ttttgacttc tgaaccttg tgttatgaca ttaaggaaaa 3660
95 cctgagtggg gataatgtgc tcaccatttg gactttgctt caggcctgga atggggcctc 3720
96 aattgttcat aattaagcca gaatcagaat tggggggtct gtgttccaag atcttcccta 3780
97 taatgtcaga acatcacgca gaaaaagaaa ctctgtcttt tataaactac tgacaatttt 3840
98 tccccctcca tgaggaggtg acaccacaa gaaagctaaa taaatgcaga gaagaattca 3900
99 gtgtaattta ttatccgtgc agcaaagata gaggacgaga ggagaggaag tggatggcgg 3960
100 tgctgaaac caaacattta ccatggagca cagagtaaac agatgttgca cttacccttc 4020
101 tgactacaaa aggagcccac agatgtaatt cttctccaac cacaatctca gcctggaaaa 4080
102 agaggaggca gatgaaaatg aactctcaca cggggccact tctccccatc ttgccgtcct 4140
103 tgtctagagg caggcagagg cccacttctc actgcagtga ggggtggcct gaacgggtga 4200
104 gtgggggcaa gagtggacat ctttggtttt tcaactggct ctggaacatg ctggagactg 4260
105 ctgtatttaa ataaacattt cctgtttgcg aaggagaacg ggcgaaaggc tgaaacgtga 4320

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/533,365

DATE: 05/19/2005

TIME: 10:51:48

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\05182005\J533365.raw

```

106 gaatgtggta acttaatttt ctccatcact ccaaatgacg gctagctttg ccggtgggtg 4380
107 ggccaataa aaactgacac catgtcatag gctttccctc acttgaccac agaggtcctg 4440
108 aggtcaagt agagactttc caagatgctc aacagccaag tcctctgtcc agccctcagg 4500
109 gccagcttag aggacaggaa caagctagt gctcatgggg tctctctggg tcaaccacgg 4560
110 tgatgtggcc ttttagggaa acacagtgcc ctctctggaca gactaaggag cagctgagtg 4620
111 gaccgcctc cagtggaccg gtatagcctc catggtgctg tgcaactctg aacggattac 4680
112 attacctctc tgggcctcat tttcatgaaa gtagaattct tgtatagtct tagtgggttt 4740
113 cttagtgggt atagtccact gggggaactg taagtatccg cctccctagt gtctagaaca 4800
114 gtgcctggca cacagtaggt gttcagcaga tgtgtattta ataaaggaat aatgaacctc 4860
115 aaaactacaa gtctgtcttt agttcttaaa agtgaaagat gggccattat agatctgcat 4920
116 tctggcatat gactaaggga tcctcactag taacctatga catgagttat taagggtatc 4980
117 taaaatttgg attttatgaa ctaatattta ttgccttact agagttacca aggactcctg 5040
118 ttgagtgatc tactctggag tctgggtgcc aggcatgtct tagcaacctt gcaaaactcc 5100
119 tactgtgcac atgcccatga aaagaactgg aaatcctgag cacttaaacc acagggtctt 5160
120 ctaatcagga actcatcagc gtcacacctg gtgctctgtg ggttttgatt gctgctcttc 5220
121 ttgtattaat tgataagttc tgcttttggt gatcatctgg attttctatt atttctgcac 5280
122 ttttgccgtt ttgattgtta tgttgtttcc tctccagtat tgtttgtgtg cacagagttc 5340
123 tgtctcacct ggaaagttag aatgaacagt ggggtgcagc tgtagaacct cttgccttgg 5400
124 caatgtgggc tatggcaaga aggttcccga ccctaagca tcgtgggttag ggcaggcgct 5460
125 ccggagacag acgactgtgg gtttgaattg cagctctgtt acatcttgtt gttgcactgt 5520
126 gggcatgtta cactattgct gtggactgca gtgtgttaaa ttcttttagta ccttatttcc 5580
127 acacctgtga taccaggatg atgagcgcac ggtcttcctg gggatgctgt gaatgtagcc 5640
128 tgaggcagtc cctgtaaatg gtcagcacg gtgcctacca tgttgttcac tcattgctgt 5700
129 gattgtttat ccctctatga tttcttaact gtaaaatatg tatgatgact ctacccatt 5760
130 ggggggatta aacaaaataa tatacaggaa agtgcttaac acagtacagt catgtgttac 5820
131 ctaaaatgac attctggcca acagtggaca acatagagga cgggtggtctc ataagggttaa 5880
132 aatggagctg aagaattcct atcgccctag gacatcgtag cttttgtaat gtcatagtgc 5940
133 catcacttta tttttaataa atttagtaca gcctaagggt atagtgttga caaagtctac 6000
134 agtagtgtac agtaatgtcc taggccttca cattcactca gcactcactc actgactcac 6060
135 ccagagcaac ttccagtcct gtaagcttta ttcttggtaa atgccctgtg cagatgtacc 6120
136 attttttatc tttcatacca tactttgatg gtaccttttc tatgtatagg tatgttgaga 6180
137 aacacacata cttatgattg tgtcacagt gcttacggta ttctgtagag gaacatgcta 6240
138 tgagggtttg gagcttagga gcaataggct atcacatcta gcctagacgt atagtggcct 6300
139 agaccatctg ggctcggtgt agtgcaactc atgaggtttg cacaatgacg aaatcgccct 6360
140 atggtgagtt tcttagaacg tatccccatc attaagtgtat gcatgacccc accataggag 6420
141 ccctccctga actattcatg ttagtgacca tggctattac ctttatatct tcatctcagg 6480
142 ccctatccag ctggaagggt tgagacgccc atcctaaact tgctccaacc cagagccctg 6540
143 tggaagcgac ttccctgcct gcctgtgggc tatgcccaat accctcttgg ctaggccctc 6600
144 ccttttctct ctctgctctt ggtcctgccc ccacagcaga gccaggttg gcttctgttc 6660
145 cataaaaagg gaattgtggt gaaagtgggt tataatcttt ccattgggtgt gttgctttgt 6720
146 ggtatattta aataagggaat gcattttatt tatttatatt tgggggggtg gttttcatgg 6780
147 ggaatttttg gccctgactt tttttttttt tttcaatgct cattccttct atttttcctt 6840
148 aaataacctc ttttactgac ttcccatgtc tgccctctatt actgtgttta cttgaaacag 6900
149 ctgtatttcc tagcaggctc caccctcatt atgtaagggt gtcttaaccc tttttaggac 6960
150 tgctgaaaag aaaggaaaaa caaggggtgg aggcatccc agagagctca tctggaccac 7020
151 tgctgatcac aagctagatg gctgtagagg gtgccctggc actgtgctga gctccccgtg 7080
152 ctctccgttc ttcattgttc tccatccttg aattcaaata agccttgcca aggttggatg 7140
153 ctcatgttgg gaatcctcta cctctctgct ctgcaggcct ggacggtgat ctgtaactac 7200
154 tgtgactgct ggccgtgtcaa gaggctaacc tttcttcccc actcactgtg gtcttcatag 7260

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/533,365

DATE: 05/19/2005

TIME: 10:51:48

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\05182005\J533365.raw

```

155 ttgtgttgctc agtaccatgt ttgatacagt gaaacctgtg aaaaaaattg gccaaagcgt 7320
156 gcatgattag agccttctgt actgctgtga cagagaagat aggaaaatgt ggccactagag 7380
157 ccagactctg gggcccaaag cccggttctg tcacctacta gctggatggg cctcagtttt 7440
158 cccatttgca aaatgggaat aataataata ctcccttcaa aggatgctgt attaataccac 7500
159 ataggctgcc tggaaccaag ggcacctcc atcaatattc ctattgttat tatggtcaaa 7560
160 agtcttactg agtgtagacc tcctatcaga gcatgatcag gatgaagctt cattaagaaa 7620
161 aatacagatc gtcagcgttg gaagaggtcc atttgcctaa gttccaacca cacgaaggtt 7680
162 ggtcttccat cagcatgatt taggggaagg tggtcagtta gcctccttg ctgtatgata 7740
163 tctagtgatg aggagctcag ttcttcctaa agcaatttat tccattaaaa aaaccacaat 7800
164 cctaataaga aaatgttctt tgtgtgggga ttggacttat ctctcattga ttgttgtaac 7860
165 ccagagcatg tataatcttt tttccaaatg acaggttttc aaaagtctta ttgctgtggg 7920
166 gtttctcacc acccatttac cggagtctcc ttaattgcct caactattct gtatgtggta 7980
167 cagtttgggc ataggcctcg tactccatcc atagtctct tcctctaaat aggttccaat 8040
168 ctcttggtgac tgtattagtt agaaggagac ctccatgcc ttactgttt tatttgactt 8100
169 ctatcagcca gcgcattcaa aagaaccttt tcactttgga cagccacagc cctgggtagg 8160
170 ctcatcttga ccaagctgcc tgacatcccc atatctcccc agtcttcct gctgttagct 8220
171 tgttgtcccc tcttctagac ttgtgcagtt gactttttgg agtctaagtg caacactttg 8280
172 catttatcct aattaacttt tggcaaatca tttcatttca tcagcttttc aggagcattt 8340
173 tctatttcga tttcctcatc tagcaattaa ctactccttt ccccatctcc cactatttat 8400
174 ttctctgca attttaatga gcttgcccta tggatcttta tccaagttgt caatataatc 8460
175 agcagagttc tctgtgcatt tttttcaaaa tctttctaca atctggcatg tggattacat 8520
176 aaatatattg ccccgttctt tccggctggg atggaaaaaa atgttgaggt cttcttggct 8580
177 tgtagcatct tctttccctg gggttctgtt gggtcatatt ttctctggaa taatttccta 8640
178 ttaatgctta attcttcagc ttgctaaatt ttctctatac tcttggtttc tcatggaact 8700
179 ttccataatg acttttagctt catttttgtc ctattaggct agtaccacaa gtctcaccaa 8760
180 cacaggatat gacgcatgta tgtgtgtgta tgttgaaatgt gtatgtatat gtgtgttatt 8820
181 ctctcctggt aaaaagttca gcctgagggg ttgagccttt ctgccagtag cagagctcag 8880
182 gtagcttcag gtttttaaac acagtgattt cccttagcat cttgggtaca cattggcatc 8940
183 gggcacattt tctggagtag ttctgggaac agacatgatg aagaatgaag cataggggac 9000
184 cagggcctac agggctccca agcctctgta aacgacaaca acaaccatca ccacaacaat 9060
185 agctggcatt tattgagcct ttctttgtgc ctggcactgc tcttacactt tacatgcgtg 9120
186 gagtcaattc ctatttgaag agttatgta agtaggcagg actgtctgca ttttatagat 9180
187 gtggcaacta cgtcagagag gtgaaataac atccccagta aggaacagga gaggcagggt 9240
188 tcatccagcc aggctggtct cagaggctgc actccaaact ccagtcatgt catcccttcc 9300
189 agaactcttc aagtcagcct ccttttctgt ctctaaact ctattctcaa gtaacaacta 9360
190 gaagaagaca aacatgatga gttcaactta aatcaaagag cccctgttcg aggcaaagca 9420
191 tcaagaagaa tgtcaatgat gtgatctgga cacctggtga aacagagcca tcatgtccaa 9480
192 tttggggaaa taggtggcct ttgtattgga gcgtgaagac taatgggatc cctgtgcgta 9540
193 gaaatgggaa cgtggtacag tcacagaaat tcatgattag atgtcctga gcccaactta 9600
194 aaatgatggg agctgcactt tgggaagttt tatctcatgg ggatgtttag aacagaatcc 9660
195 aaatcttagg aaaatatctc catggtatgt gtccactaac tgttttttaa atttctggtt 9720
196 tgaggggata caccctccaa gagtagttct gatgaacctt gctgaataat attttccgcc 9780
197 tcaagcatct actcaaagt cggcaggagt catcttcctt tgcagttaga tgcaccactt 9840
198 gctttctctt agccgggatc tctgggctcc tcccacctg gcatcaggtc ttgttccaac 9900
199 aggatgtaca taagatgtat cctggctgga gtcgagtgtg actgcactta tcacggccat 9960
200 atcactgctt gtgtgggctc agactcctct tctctgtcc taactgcca tctggttcc 10020
201 gaccctgat tcatccgca ctttggcagc agtgtatcct gtggctcctg aaagtctgcc 10080
202 agcacactta accaccacc ttgtctacct cttgggtttt tctacctctc tagctcctgt 10140
203 ctgttaccag tcatatccat tctttgcct agcacgtgcc ctagtgtatt ccctagtgt 10200

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/533,365

DATE: 05/19/2005

TIME: 10:51:48

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\05182005\J533365.raw

```

204 caccctagcg tatgccctag catgtgccct agcgtgtgcc ctagtgggtg ccatagcatg 10260
205 tgccccagtg tatgccctag cgtgtgccct agtgggtgcc atagcatgtg cccagtgta 10320
206 tgccccagtg tgtgccctag cgtgtgccct agcatatgcc ctagtgcgtg ccctagtgcg 10380
207 tgccccagca tgtgccctag cgtatgccct agtgcgtgcc ctagcatttg ccctagcata 10440
208 tgccccgcac gtgccctagt atatgcccta gtgtatgtcc tagcatgtgc cctagtgcgc 10500
209 accctagtgt gtgccctagc gtatgcccta gtatgcgccc tagtatatgc cctagcgcac 10560
210 gcactagtgc gtgccctagt atgtacccca gtgtatgtcc tagcgtgtgc cctagcatgt 10620
211 gccctagtgc gcaacctagt gtgtgcccc gtgtatgccc tagtgtgtgc cctagtatat 10680
212 gccctagcgt gtgccctagc acatgtacta gtgcgtgccc tagcatatgc cccagtgtat 10740
213 gccctagcgt gtgccctagc atgtgccctg gtgcgcgccc tagcgtgtgc cctagcatat 10800
214 gccctaatat gtgtcccagc atgtgcccta gcatgtgccc tagtgcgcac cctagcgtgt 10860
215 gccctagcat atgtcctagt gcacacccta gcatatgccc tagcatgtgc cctagcatat 10920
216 ttctagtgt gtgccctggc gtatgcccta gtgcatcccc gagtgtgtgc cctggcgat 10980
217 gccctagtgt acgttctagc atatgtccta gtgtgtgccc tggcgtatgc cctaagtac 11040
218 gttctagcat attccctagt gtgtgcccta gtgtatgccc tagtgtgtgc cctagcatat 11100
219 tccctagtgt gtgccctagc gtatgccctg gtgtatgttc tagcatatgc cctagtatgt 11160
220 gccctagcat atgccctagt gtgtgcccta gtgaatgccc taactcaggt atgtctgcat 11220
221 gctgtggagt ccctagtcct cttctaactc gagttttatg acttgaccat agaattgtgc 11280
222 atgtttgcat ctctccctga gctttagcta ctctggctc ctgcctaat cttctagct 11340
223 tggcttcttg ccctctactg ccctctatgt attctccata gccttagtat tgaatttgga 11400
224 ctgtcaccat cagaacccca ggtcctgaaa ttggatttca tggcctggac cttcactgga 11460
225 gactgcagac ttgcaagaac tcagagttct gccctggaaa caacctcaga cttcgtcttt 11520
226 atggccatct gaaatctttt atcatgtcca gggtagcatg taaaagtgcc ccagggtgg 11580
227 actctataaa tgatgaatta cttagacata ctctgaact ccctgtatcc caaataggac 11640
228 agatcatttt gtaattaaaa agcgcagcag tgatgatctc attggagagc tgtcctgttc 11700
229 aataatgtgt tgcagaaatt tctggactat ctagtacttt gctgacattc tttctctcct 11760
230 cttcttctct ctccagctct agaatgtagg tagaaagtgt tctgagtatg gggattctaa 11820
231 gtggaattag tgagaagcca agggggagta caatttggat gtaagccgaa atgagtagaa 11880
232 agacctaggc tgaatcctgg cttctgtcac tttctaactg cccgacctgt ctgagtacct 11940
233 ttgcggtctc catagtctca tctataacct ttggaatggg agaaataaca ctcatctcag 12000
234 ggggctgatg caaggtttaa atgagatcag atgtctccaa atgccttcta aatttagtgc 12060
235 tatgcgaata ccttaatgag tccaccaca atatctgaat tgaaccacta aatcctgtat 12120
236 ctggaagacg atcagggtat attttagaag ctttcattta cagatgaaga aactcaggga 12180
237 gctccaaagc cttgtctaga gtcaccatg tcttcaaact cttgttccag tttccttttc 12240
238 atttaacaag atgcatcttt tacaaattaa aatataacct cataccagcc atgtcagcag 12300
239 cttaaccagg tggagtttag aggactgggt aattaataag tgacagtgtc caagacagta 12360
240 ggaccaaata agggaatcca tgaaggatgg agtcatttaa aggggccatt tattgagtgt 12420
241 ctaccacaat gaataaagca agtgaaatgt tctggtaact agaacagttc aaactaactt 12480
242 caaagttagt ctggactgtc tctccctcta aatgactgac aaggcaaagg ctaccatgct 12540
243 aggttcagag caggagatt tatgggttgg gagaaatgct agaaccatga aggatgtagc 12600
244 accaaaccct caggaatcat tgatgaaagc aagccccctc atccctttta gtgggtacaa 12660
245 atatgtagaa agcctcccac atcataaaaa aatagtacaa gtggaattaa aaaaaaactc 12720
246 aagggggaaa tattaatctg agaacaattg tatctgagaa agcattcaag tatgcctctg 12780
247 cagctagctg gcaaacagca caagtctgtc attttattag agttctaact ctgtgtagaa 12840
248 cactgacctt atttgagaag catttcataa aactgacac acagcacagc agcatttgag 12900
249 gccatgagga gatacagggc cttctttagg gggccagctt cccttcccct cctcggtgc 12960
250 aagggacccc taggacattg tttccctgag tggtaatatc tttatttttc tctcttaggt 13020
251 ttaactcagc aggaggaatt ttcctagggg aaaatgaggg agggggattt ggaataaaat 13080
252 ttgtactttg ggcaagtttg cctaagcatg gggtaggcga tggggaagac cctgctctgg 13140

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/533,365

DATE: 05/19/2005
TIME: 10:51:49

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\05182005\J533365.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 88,164
Seq#:18; N Pos. 33,36,72,281,311
Seq#:23; N Pos. 124,175,320
Seq#:25; N Pos. 24,97,104,274
Seq#:33; N Pos. 4,55,133,189,227,228,252,259,263
Seq#:58; N Pos. 49,53,57,259,322
Seq#:81; N Pos. 18,197
Seq#:85; N Pos. 7,61,86,339
Seq#:179; N Pos. 560,561,563
Seq#:180; N Pos. 560,561,563
Seq#:181; N Pos. 560,561,563
Seq#:206; N Pos. 58,203,254
Seq#:207; N Pos. 33,36,72,281,311
Seq#:208; N Pos. 97,267,274,347

VERIFICATION SUMMARY

DATE: 05/19/2005

PATENT APPLICATION: US/10/533,365

TIME: 10:51:49

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\05182005\J533365.raw

L:15 M:270 C: Current Application Number differs, Replaced Application Number
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:10639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:60
M:341 Repeated in SeqNo=3
L:10823 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
M:341 Repeated in SeqNo=18
L:10889 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:120
M:341 Repeated in SeqNo=23
L:10920 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
M:341 Repeated in SeqNo=25
L:11024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
M:341 Repeated in SeqNo=33
L:11339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0
M:341 Repeated in SeqNo=58
L:11630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0
M:341 Repeated in SeqNo=81
L:11682 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:0
M:341 Repeated in SeqNo=85
L:13229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:179 after pos.:540
L:13252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:180 after pos.:540
L:13275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:181 after pos.:540
L:13873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:206 after pos.:0
M:341 Repeated in SeqNo=206
L:13892 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:207 after pos.:0
M:341 Repeated in SeqNo=207
L:13912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:208 after pos.:60
M:341 Repeated in SeqNo=208